



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

**D4436-045**  
**Job Sheet 188228**



Part No: D4436-045

Job Qty: 6 ea

Part Name: Aft Inboard Bracket Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/4/19

Job Tracking No:

Due Date: 1/18/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: D4436 REV.B IPP revA 11.10.06 new issue EC verified by:DD IPP RevB 11.12.22 per PA2 EC verified by:JLM  
IPP REV:C 12.01.24 PER DWG REV.A DD VERF:EC

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation           | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off       |
|-------|---------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|----------------|
|       |                     |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |                |
| 100   | Waterjet - Flow - 1 | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 1.07    | Waterjet - Flow       |           | 58 FEB 13 2019 |
| 110   | QC                  | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 0.00    | QC2 Waterjet-3        |           | 58 FEB 13 2019 |
| 120   | QC                  | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 0.00    | QC8-4                 |           | 58 FEB 13 2019 |
| 125   | Small Fab           | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 1.17    | Small Fab-6           |           | 58 FEB 13 2019 |
| 130   | Brake NC            | 6 pcs | 1/18/19    | 1/18/19  | 0.08      | 0.83    | Brake NC 2            |           | 58 FEB 13 2019 |
| 150   | QC                  | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 0.00    | QC5                   |           | 58 FEB 13 2019 |
| 160   | HandFinish          | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 0.52    | HandFinish1           |           | 58 FEB 13 2019 |
| 170   | QC                  | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 0.00    | QC7-3                 |           | 58 FEB 13 2019 |
| 180   | Small Fab           | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 1.17    | Small Fab-6           |           | 58 FEB 13 2019 |
| 185   | QC                  | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 0.00    | QC5                   |           | 58 FEB 13 2019 |
| 190   | Powdercoat          | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 0.30    | Powdercoat4           |           | 58 FEB 13 2019 |
| 200   | QC                  | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 0.00    | QC3                   |           | 58 FEB 13 2019 |
| 202   | Small Fab           | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 1.17    | Small Fab-6           |           | 58 FEB 13 2019 |
| 205   | QC                  | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 0.00    | QC5                   |           | 58 FEB 13 2019 |
| 210   | Packaging           | 6 pcs | 1/18/19    | 1/18/19  | 0.00      | 0.00    | Packaging3-2          |           | 58 FEB 13 2019 |
| 220   | QC21-SA             | 6 Ea  | 1/18/19    | 1/18/19  | 0.00      | 0.00    | QC21                  |           | 58 FEB 13 2019 |

Part Op 100 - 1-Cut D4436-3 as per Dwg Dwg Rev: B Prog Rev: B 2-Deburr if necessary

Descriptions: 125 - 1- Transfer drill holes as per dwg. 2-C"SINK AS PER DWG 3-TRANSFER 0.129 HOLES THRU (2 PLACES)

180 - Assemble as per dwg, do not install grommets and rubber seal.

190 - START TIME: 9:05 OVEN TEMPERATURE: 325 FINISH TIME: 9:35

202 - Cut qty 1 to 3.8" Cut qty 1 to 10.00" Install rubber seals and grommets, as per dwg

### Job BOM

| Part / Item   | Component Name        | Quantity            | Operation               | Container |
|---------------|-----------------------|---------------------|-------------------------|-----------|
| M6061T6S.040  | 6061-T6 .040 Sheet    | 4.1340 sf (.689 ea) | 100-Waterjet - Flow - 1 | 5152150   |
| MS20426AD3-13 | Rivet                 | 24 Ea (4 ea)        | 180-Small Fab           | 5018535   |
| MS20470AD4-3  | Rivet, Universal Head | 12 Ea (2 ea)        | 180-Small Fab           | 5057460   |
| MS21075L08    | Anchor Nut            | 12 Ea (2 ea)        | 180-Small Fab           | 5147552   |
| D4441-1       | Rubber Seal           | 6.9000 ft (1.15 ea) | 202-Small Fab           | 5092167   |
| MS35489-19    | Grommet               | 6 Ea (1 ea)         | 202-Small Fab           | 5067899   |



Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                 |  |                                                       |  |                                                          |                                     |                                             |                                      |                                            |  |
|-------------------------------------------------|--|-------------------------------------------------------|--|----------------------------------------------------------|-------------------------------------|---------------------------------------------|--------------------------------------|--------------------------------------------|--|
| <b>Job:</b> _____<br><b>Part No.</b> _____      |  | <b>DISPOSITION</b>                                    |  | <b>DEPARTMENT/PROCESS</b>                                |                                     |                                             |                                      |                                            |  |
|                                                 |  | Rework <input type="checkbox"/>                       |  | Skid-tube <input type="checkbox"/>                       | Cross tube <input type="checkbox"/> | Eng. (Non-AW) <input type="checkbox"/>      | Engineering <input type="checkbox"/> |                                            |  |
|                                                 |  | Small Fab <input type="checkbox"/>                    |  | Machining <input type="checkbox"/>                       | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Water Jet <input type="checkbox"/>   |                                            |  |
|                                                 |  |                                                       |  |                                                          |                                     | aging <input type="checkbox"/>              | Supplier <input type="checkbox"/>    |                                            |  |
|                                                 |  |                                                       |  |                                                          |                                     |                                             | Quality <input type="checkbox"/>     |                                            |  |
| <b>Date :</b> _____                             |  |                                                       |  |                                                          |                                     |                                             |                                      | <b>MRB (QSI042)</b>                        |  |
| <b>Description Work</b>                         |  |                                                       |  |                                                          |                                     |                                             |                                      | <b>Completed By</b>                        |  |
|                                                 |  |                                                       |  |                                                          |                                     |                                             |                                      | <b>Lead hand / Supervisor</b>              |  |
|                                                 |  |                                                       |  |                                                          |                                     |                                             |                                      | <b>QC / QA Coordinator</b>                 |  |
| <b>Root Cause</b>                               |  |                                                       |  |                                                          |                                     |                                             |                                      |                                            |  |
| Operator <input type="checkbox"/>               |  | <input type="checkbox"/> Bending                      |  | <input type="checkbox"/> Misaligned/off center           |                                     | <input type="checkbox"/> Wrong Program      |                                      | <input type="checkbox"/> Positioned Wrong  |  |
| Manufacturing Process <input type="checkbox"/>  |  | <input type="checkbox"/> Crushing                     |  | <input type="checkbox"/> BOM/Route                       |                                     | <input type="checkbox"/> Grain Direction    |                                      | <input type="checkbox"/> Outside Tolerance |  |
| Equip/Tooling <input type="checkbox"/>          |  | <input type="checkbox"/> Cracks                       |  | <input type="checkbox"/> Broken/Damage/Defect            |                                     | <input type="checkbox"/> Weld               |                                      | <input type="checkbox"/> Drawing           |  |
| Handling/Presservation <input type="checkbox"/> |  | <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist |  | <input type="checkbox"/> Incomplete/Unclear Instructions |                                     | <input type="checkbox"/> Wrong Stock Pulled |                                      | <input type="checkbox"/> Finish            |  |
| Material <input type="checkbox"/>               |  | <input type="checkbox"/> Marks/Chatter                |  | <input type="checkbox"/> Drill Holes                     |                                     | <input type="checkbox"/> Out of Sequence    |                                      | <input type="checkbox"/> Part Lost/Missing |  |
| Product Improvement <input type="checkbox"/>    |  | <input type="checkbox"/> Mislabeled                   |  | <input type="checkbox"/> Fit/Function                    |                                     | <input type="checkbox"/> Off-set/Set-up     |                                      | <input type="checkbox"/> Misread           |  |
| Process Improvement <input type="checkbox"/>    |  |                                                       |  |                                                          |                                     |                                             |                                      |                                            |  |
| Human Factors <input type="checkbox"/>          |  |                                                       |  |                                                          |                                     |                                             |                                      |                                            |  |
|                                                 |  | <b>Other/Details:</b>                                 |  |                                                          |                                     |                                             |                                      |                                            |  |

**DART**  
AEROSPACE

Part: D4436 - 045  
Job No: 188228  
Serial No/Batch: S153198

Inspector: B  
Exp Date:  
Instructions: Various STC's

Date: 02/12/19

Container No: S153198

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Newkensbury, ON K6A 1K7  
CANADA  
TEL: 1 813 632-8200  
Email: sales@dartaero.com  
www.dartaerospace.com

### Job Allocations

| Operation               | Component Part | Required | Inventory | Allocated |
|-------------------------|----------------|----------|-----------|-----------|
| 100-Waterjet - Flow - 1 | M6061T6S.040   | 4        | 11        | 0         |
| 180-Small Fab           | MS20426AD3-2   | 24       | 18,520    | 0         |
|                         | MS20470AD4-3   | 12       | 4,733     | 0         |
|                         | MS21075L08     | 12       | 31        | 0         |
| 202-Small Fab           | D4441-1        | 7        | 483       | 0         |
|                         | MS35489-19     | 6        | 78        | 0         |

### Part Specifications

Specifications could not be found.

Plex 1/4/19 12:10 PM Dart.lajeunesse.marie



Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                      |  |                        |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Sequence #:                                                                                                                       | QTY Affected :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | MRB (QSI042)           |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Completed By           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Lead hand / Supervisor |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | QC / QA Coordinator    |  |
| <b>Root Cause</b><br><br><div style="display: flex;"> <div style="flex: 1;">           Operator <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Presservation <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Human Factors <input type="checkbox"/> </div> <div style="flex: 1;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> </div> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex;"> <div style="flex: 1;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="flex: 1;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="flex: 1;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |                        |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                        |  |

